Instructional time in the classroom

The amount of instructional time students receive in the classroom is one indicator of students' access to various learning opportunities. Instructional time for students can vary both between and within countries. Time is a limited resource, and the amount of time teachers and students spend together is an important part of a student's educational experience.

- In 1994, the United States reported the largest number of teaching hours per year across all school levels, compared to seven other OECD countries. While U.S. teachers spent about the same number of hours teaching across all levels of education, teachers in most other OECD countries spent more hours teaching at the primary level than at the upper secondary level.
- In the United States, France, and Spain, nearly 70 percent or more of eighth-grade students spent 3.5 hours or more per week in mathematics class in 1995. In Germany, Ireland, and Sweden, no more than 15 percent of eighth-grade students spent more than 3.5 hours per week learning mathematics. The United States had one of the larger percentages of eighth-grade students (11 percent) spending 5 or more hours per week in mathematics classes.
- In 1995, fourth-graders in the United States were more likely to spend 3 or more hours per week in science class (42 percent) than their counterparts in most other countries, with the exception of Thailand and Portugal, where at least 70 percent of the students spent 3 or more hours per week in science class (see supplemental table 38-1).

Number of teaching hours[1] per year in public institutions, by school level and country: 1994

	School level[2]			
Country	Primary	Lower secondary	Upper secondary (general)	Upper secondary (vocational)
Denmark	750	750	480	750
France	923	660	660	660
Germany	760	712	650	665
Ireland	915	735	735	735
Italy	748	612	612	612
Spain	900	900	630	630
Sweden	624	576	528	612
United States	958	964	943	—

— Not available.

[1] "Number of teaching hours per year" refers to the total number of hours per year during which a full-time classroom teacher is responsible for teaching a group or class of students, according to the formal policy of the country in question. See the supplemental note to this indicator for further discussion.

[2] Education at the primary, lower secondary, and upper secondary levels corresponds to the International Standard Classification of Education (ISCED) levels one, two, and three, respectively. See the glossary for details on the ISCED levels.

SOURCE: Organization for Economic Co-operation and Development, Center for Educational Research and Innovation, *Education at a Glance: OECD Indicators*, 1996.

Percentage of eighth-grade students whose teachers reported time spent teaching mathematics, by number of hours per week in class and country: 1995

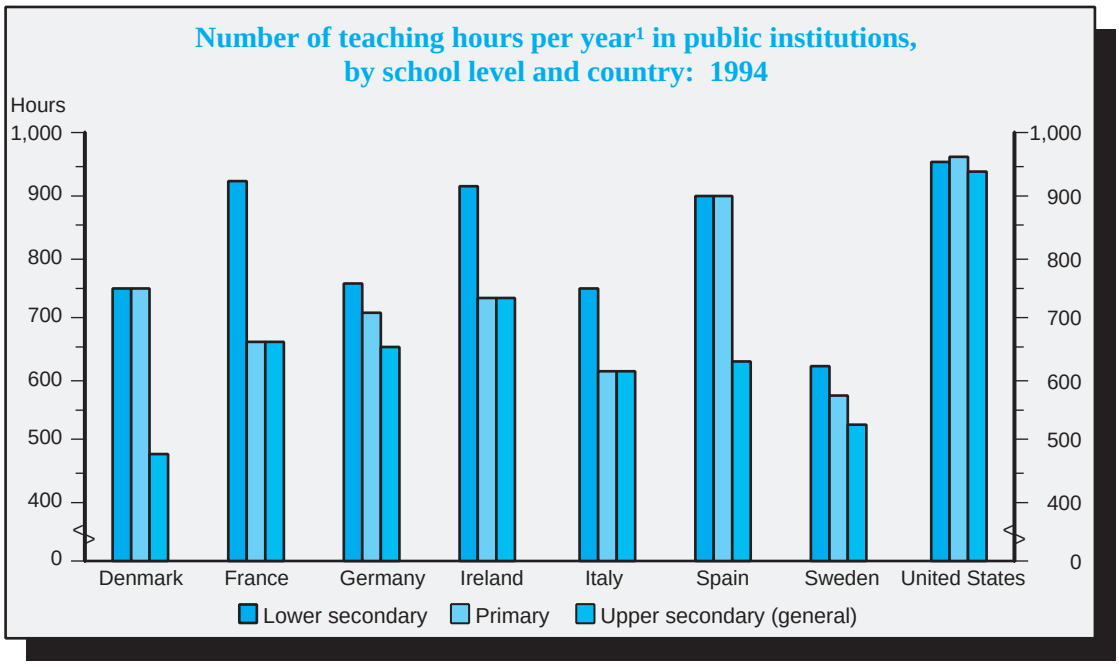
	Number of hours per week in class			
Country	Less than 2 hours	2 hours to less than 3.5 hours	3.5 hours to less than 5 hours	5 hours or more
France	2	10	87	2
Germany*	2	85	12	1
Ireland	1	86	12	1
Spain	2	28	62	8
Sweden	3	97	0	0
United States	8	24	58	11

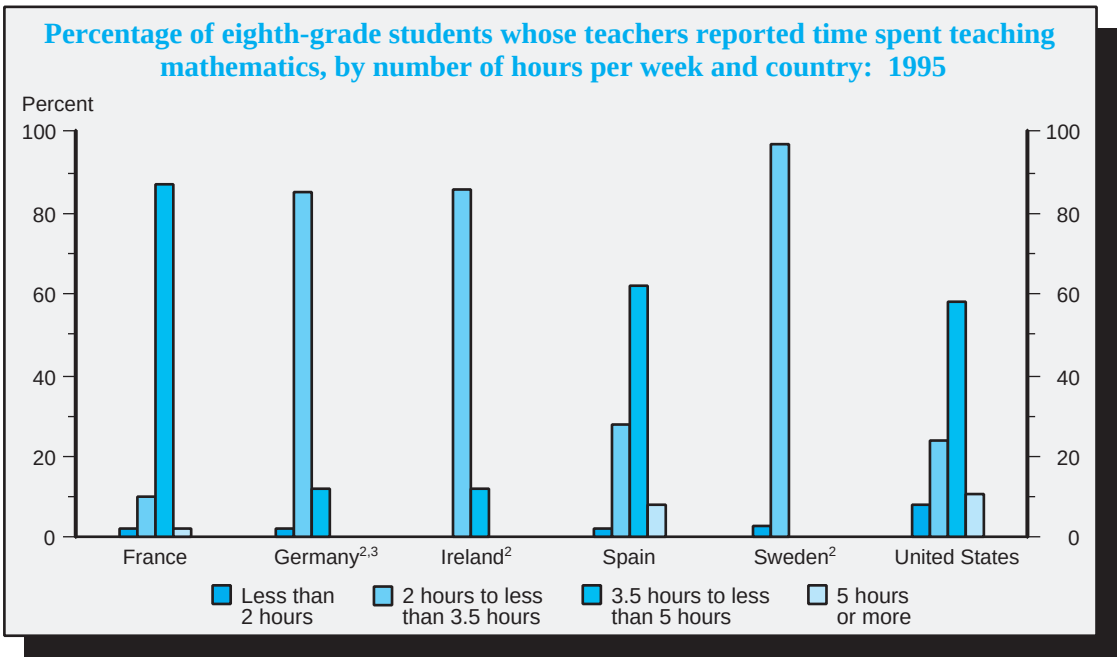
* Did not meet international sampling or other guidelines.

NOTE: In most countries, students classified as eighth-graders are students in the eighth grade; however, for some countries, these students are enrolled in one grade level above the eighth grade. See the supplemental note to *Indicator 20* for further explanation on countries that complied or did not comply with various data collection and sampling guidelines for the Third International Mathematics and Science Study (TIMSS).

SOURCE: International Association for the Evaluation of Educational Achievement, TIMSS International Study Center, *Mathematics Achievement in the Middle School Years, IEA's Third International Mathematics and Science Study*, 1996.

Instructional time in the classroom





[1] "Number of teaching hours per year" refers to the total number of hours per year during which a full-time classroom teacher is responsible for teaching a group or class of students, according to the formal policy of the country in question. See the supplemental note to this indicator for further discussion.

[2] The percentage of teachers who reported that their eighth-grade students spent selected categories of time in school learning mathematics was less than 1.0 percent; therefore, percentages are not presented in the graph.

[3] Did not meet international sampling or other guidelines.

NOTE: In most countries, students classified as eighth-graders are students in the eighth grade; however, for some countries, these students are enrolled in one grade level above the eighth grade.

SOURCE: Organization for Economic Co-operation and Development, Center for Educational Research and Innovation, Education at a Glance: OECD Indicators, 1996. International Association for the Evaluation of Educational Achievement, TIMSS International Study Center, Mathematics Achievement in the Middle School Years, IEA's Third International Mathematics and Science Study, 1996.

Table 38-1 Percentage of fourth- and eighth-grade students whose teachers reported time spent teaching science, by hours per week and country: 1995

	Fourth grade				Eighth grade			
Country	Less than 1 hour	1 hour to less than 2	2 hours to less than 3	3 hours or more	Less than 2 hours	2 hours to less than 3.5	3.5 hours to less than 5	5 hours or more
Australia[1]	35	55	5	5	(3)	(3)	(3)	(3)
Austria[1]	0	0	97	3	(4)	(4)	(4)	(4)
Belgium(Fl)	—	—	—	—	(4)	(4)	(4)	(4)
Belgium (Fr)[1]	—	—	—	—	(4)	(4)	(4)	(4)
Canada	8	42	27	23	11	69	11	8
Colombia[1]	—	—	—	—	6	75	13	6
Cyprus	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)
Czech Republic	2	79	3	16	(4)	(4)	(4)	(4)
Denmark[1]	—	—	—	—	(4)	(4)	(4)	(4)
England	6	27	44	23	—	—	—	—
France	—	—	—	—	(4)	(4)	(4)	(4)
Germany[1]	—	—	—	—	(4)	(4)	(4)	(4)
Greece[1]	—	—	—	—	(4)	(4)	(4)	(4)
Hong Kong	13	84	2	1	7	82	9	2
Hungary[1]	6	72	8	14	(4)	(4)	(4)	(4)
Iceland	17	41	30	12	(4)	(4)	(4)	(4)
Iran, Islamic Republic	—	—	—	—	—	—	—	—
Ireland	47	40	11	2	4	94	2	0
Israel[1]	0	53	32	15	19	77	4	0
Japan	2	1	95	2	5	94	0	1
Korea	0	1	95	5	43	51	1	5
Kuwait[1]	0	1	96	4	3	97	1	0
Latvia (LSS)[1,2]	89	5	5	1	(4)	(4)	(4)	(4)
Lithuania	—	—	—	—	(4)	(4)	(4)	(4)
Netherlands[1]	38	44	9	9	(4)	(4)	(4)	(4)
New Zealand	29	48	14	9	1	52	47	0
Norway	73	27	0	0	27	73	1	0
Portugal	2	3	12	84	(4)	(4)	(4)	(4)
Romania[1]	—	—	—	—	(4)	(4)	(4)	(4)
Russian Federation	—	—	—	—	(4)	(4)	(4)	(4)
Scotland[1]	35	44	14	7	14	83	3	0
Singapore	0	4	96	0	0	24	76	0
Slovak Republic	—	—	—	—	(4)	(4)	(4)	(4)
Slovenia[1]	3	60	18	19	(4)	(4)	(4)	(4)
Spain	—	—	—	—	5	84	11	1
Sweden	—	—	—	—	(4)	(4)	(4)	(4)
Switzerland	—	—	—	—	41	37	9	13
Thailand[1]	2	9	17	73	(3)	(3)	(3)	(3)
United States	9	16	33	42	(3)	(3)	(3)	(3)

— Not available.

[1] Did not meet international sampling or other guidelines for the primary and/or middle schools study.

[2] Because coverage falls below 65 percent, Latvia is designated LSS for Latvian-Speaking schools only.

[3] Teacher response data were available for less than 50 percent of the students. Thus, the sample size was too small for a reliable estimate.

[4] Country did not use the integrated science questionnaire, from which numbers of hours in science class for eighth-grade students were measured.

NOTE: In most countries, students classified as eighth-graders are students in the eighth grade; however, for some countries, these students are enrolled in one grade level above the eighth grade. See the supplemental note to *Indicator 20* for further explanation on countries that complied or did not comply with various data collection and sampling guidelines for the TIMSS.

SOURCE: International Association for the Evaluation of Educational Achievement, TIMSS International Study Center, *Science Achievement in the Middle School Years, IEA's Third International Mathematics and Science Study*, 1996, table 5.5; *Science Achievement in the Primary School Years, IEA's Third International Mathematics and Science Study*, 1997, table 5.4.

Note to Indicator 38: Instructional time, as measured by the United States for comparability with other OECD countries

For this analysis, "Number of teaching hours per year" is the measure of time that a full-time classroom teacher is responsible for teaching a group or class of students, according to the formal policy of the country in question.

Data for "Number of teaching hours per year" came from the Organization for Economic Cooperation and Development (OECD), *Education at a Glance: OECD Indicators*, 1996. Most countries submitted data to the OECD based on national policy for required number of teaching hours. However, Schools and Staffing Survey (SASS) sample data for the United States (1993–94) were adjusted. Below is a description of how these data were adjusted for comparability with data from other OECD countries.

The estimate began with a SASS 93–94 variable for the response to the School Questionnaire question, "How long is the school day for students?" This number was adjusted first by subtracting 30 minutes for all teachers for lunch. The next adjustment depended on the level of the school, which was defined according to International Standard Classification of Education (ISCED) levels, as follows:

- ISCED 1 (primary). An additional (2.9*60/5) minutes were subtracted to adjust for teachers' planning time. The National Education Association's *Status of the American Public School Teacher*, 1990–91 reported that elementary teachers average 2.9 hours a week for preparation. This number is multiplied by 60 to calculate minutes per week, and is then divided by 5 to calculate minutes per day.
- ISCED 2 (lower secondary). An additional 48 minutes for preparation were subtracted. This figure is based on an estimate for 8th-grade teachers from the National Education Longitudinal Study of 1988 (NELS:88) Base Year.
- ISCED 3 (upper secondary). An additional 51 minutes were subtracted for preparation, based on an estimate for 10th-grade teachers, from the NELS:88 First Follow-Up.

These adjustments produced data for teaching hours per day, which were then multiplied by average days per year to reach an adjusted statistic for "number of teaching hours per year," compared to other OECD countries.

Table S38 Standard errors for the second text table in *Indicator 38*

Country	Number of hours per week in class			
	Less than 2 hours	2 hours to less than 3.5 hours	3.5 hours to less than 5 hours	5 hours or more
France	1.4	3.2	3.3	1.3
Germany	1.5	3.1	2.9	0.9
Ireland	0.7	3.7	3.4	1.1
Spain	1.1	4.0	4.7	2.6
Sweden	1.2	1.3	0.4	0.3
United States	1.4	3.4	4.4	2.8

SOURCE: International Association for the Evaluation of Educational Achievement, TIMSS International Study Center, *Mathematics Achievement in the Middle School Years, IEA's Third International Mathematics and Science Study*, 1996.